No.



8000001

AILE: UNIMICED SHAMES OF AVIOLEMON

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Wilbur-Kllis Company, Seed Division

Withereas, there has been presented to the

Эсэсэносэ ц звиой, срц. гу «Б. нод сзинданиес»

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, therefore, this certificate of plant variety protection is to grant unto the said applicant(s) and the successors, heirs or assigns of the said applicant(s) for the term of accentagen. Years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by LAW, the right to exclude others from selling the variety, or offering it for sale, or reproducing it, importing it, or exporting it, or using it in producing a hybrid or different therefrom, to the extent provided by the Plant Variety Protection Act T. 1542, as amended, 7 u.s.c. 2321 et seq.)

PEA

'Proto IV'

In Testimony Wincrot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 1st day of May in

this 1st day of May in the year of our Lord one thousand nine

hundred and eighty.

Aura

Commissioner

Plant Variety Protection Office

Grain Division

Agricultural Marketing Service

Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE				FORM APPROVED OMB NO. 40-R3822				
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE INSTRUCTIONS: See Reverse,			No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).					
1a.	TEMPORARY DESIGNATION OF	16. VARIETY NAM	E	FOR OFFIC	IAL USE ONLY			
	VARIETY			PV NUMBER	0000004			
	ME 229	Proto IV			000001			
2.	KIND NAME	3. GENUS AND SPE	CIES NAME	FILING DATE	TIME A.M.			
) To	Diame accion		10-11-79	2:30 _{P.M.}			
4.	Pea FAMILY NAME (BOTANICAL)	Pisum satiuu 5. DATE OF DETER		250.00	10-10-79			
	Wille (50 TANTOAL)	J. DATE OF DETER	TWINATION	\$ 250.00	10-10-79			
I	eguminosae	July 6, 197	9.	250.00	1-03-80			
6.	NAME OF APPLICANT(S)	7. ADDRESS (Stree	t and No. or R.F.D. No.,	City, State, and ZIP	8. TELEPHONE AREA			
aa 1 haa	r-Ellis Company	Code)	Empire Way		CODE AND NUMBER			
	Division		Washington	99206	(509) 922-1774			
9.		L						
9,	IF THE NAMED APPLICANT IS NOT A PEOPLE ORGANIZATION: (Corporation, partnersh	ip, association, etc.)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION		11. DATE OF INCOR- PORATION			
	Corporation		Californi	California				
12.	NAME AND MAILING ADDRESS OF APP ALL PAPERS:			SERVE IN THIS APPLI	CATION AND RECEIVE			
		lis Company, S	eed Division					
		Empire Way	99206 Att	: Eruce Taini	n			
13,	Spokane, CHECK BOX BELOW FOR EACH ATTACH	HMENT SUBMITTED:		DEGCC LCALLA				
	13A. Exhibit A, Origin and Bree	eding History of the	Variety (See Section 5	2 of the Plant Varies	ty Protection Act)			
	13B. Exhibit B, Novelty Statem			,	<i>y</i> y			
	E and Palitic C Oli in D	* .* C.1 **	· · · · · · · · · · · · · · · · · · ·					
	13C. Exhibit C, Objective Descr	nption of the variety	(Request form from	Plant Variety Protec	tion Office.)			
	13D. Exhibit D, Additional Des	cription of the Varie	ty.					
	DOES THE APPLICANT(S) SPECIFY THA' SEED? (See Section 83(a). (If "Yes," answered	er 14B and 14C below.)	IETY BE SOLD BY VAF	RIETY NAME ONLY A NO	S A CLASS OF CERTIFIED			
14b.	DOES THE APPLICANT(S) SPECIFY THA LIMITED AS TO NUMBER OF GENERAT	T THIS VARIETY BE	14c. IF "YES," TO 14 TION BEYOND B	B, HOW MANY GENER	RATIONS OF PRODUC-			
	YES , NO	.51.5.	FOUNDATION	REGISTERED	CERTIFIED			
15a	DID THE APPLICANT(S) FILE FOR PROT	ECTION OF THIS WAS						
100.	name of countries and dates.)	ECTION OF THIS VAN	RIETY IN OTHER COU	NTRIES? YES	NO (If "Yes," give			
		$(x_1, \dots, x_n) = (x_1, \dots, x_n)$						
	•	-	· · · · · · · · · · · · · · · · · · ·	A No.				
15b.	HAVE RIGHTS BEEN GRANTED THIS VA and dates.)	ARIETY IN OTHER CO	UNTRIES? YES	NO (If "Yes,"	give name of countries			
16.	DOES THE APPLICANT(S) AGREE TO TH		IIS/HER (THEIR) NAMI	E(S) AND ADDRESS II	N THE OFFICIAL			
17.	The applicant(s) declare(s) that a viable	NO	1 of this variety will b	a furnished with the	مما الشراء المستعمل ا			
	replenished upon request in accordance	e with such regulation	ns as may be applicab	le.	1 444			
1.9	The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.							
	Applicant(s) is (are) informed that false	e representation here	in can jeopardize prot	tection and result in	penalties.			
	9/26/79							
:	(DATE)		Wilher plia	SIGNATURE OF APPL	ICANT)			
		4 × 11 × 11		s Co, Seed Div	rsion			
-	/DATEL	s in a partie of	Bruce Tainio		<u> </u>			
5051	(DATE)		25 17 48 17 (S	SIGNATURE OF APPL	ICANT)			

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM.

OCT 1 0 1979

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties:

 (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



WILBUR-ELLIS COMPANY

SEED DIVISION

13 A Exhibit A

Proto IV was derived from the following crosses:₄ [(Dark Skin Perfection X B-77-161) X B-77-161] X B572-543

Dark Skin Perfection- is a Public Freezer Variety

B-77-161- is a "Afila" Mutant which is leafless and carries the following gene configurations af/af; T1/-; St/- The line was supplied by G.A. Marx at Cornell University.

B 572-543-is a multi podded, multi resistant line from G.A. Marx at Cornell University.

Dark Skin Perfection was crossed with B-77-161. The Progeny was then backcrosse ed one time to B-77-161. The Progeny from this backcross were advanced to the ${\rm F}_4$ generation and crossed with B 572-543. This material was then advanced to the ${\rm F}_6$ generation and single plant selections were made for multipod and leafless characters. We advanced these selection to the ${\rm F}_8$ generation where we found it necessary to reselect for multipod characters. Those selections we then advanced to the ${\rm F}_{13}$ where we found them to be genetically stable and began an increase program to our present quantities. We have observed no variants during our past three multiplications which we feel is evidence of uniformity and stability.

U. S. Department of Agriculture
Agricultural Marketing Service
Livestock, Poultry, Grain & Seed Division
National Agricultural Library Building
Beltsville, Maryland 20705

W E

WILBUR-ELLIS COMPANY

SEED DIVISION November 8, 1979

Attention: Mr. Thaddeus E. Frey
Plant Variety Protection Office

Subject: Pea Application
No. 8000001,"Proto IV"

Dear Mr. Frey:

In reference to your letter of October 19, 1979 concerning our leafless variety Proto IV, we would like to point out the following.

- (1) We were not aware of Rogers leafless variety "Novella" because it is not yet used commercially.
- (2) We knew that we were not the only breeder working on this type so we stated in Exhibit 13B, Exhibit B "Proto IV plant characters are unique from any commercial variety presently being used.
- (3) In every character except leaflets and tendrils, Dark Skin Perfection is the most similar variety to Proto IV. The differences between the two varieties are listed on the second page of 13B, Exhibit B.
- (4) Having no description of "Novella", I cannot say that the leafless character of "Proto IV" is the same as "Novella."

I trust this information will be to your satisfaction and will await the favor of your reply.

Sincerely,

BRUCE TAINIO

MANAGER

WILBUR-ELLIS CO., SEED DIV.

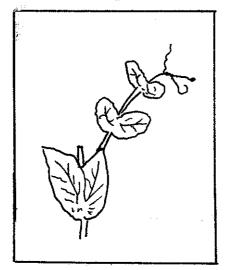


PROTO IV 13 B Exhibit B

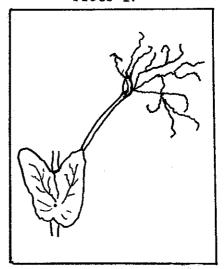
Wilbur-Ellis Company believes that we are the original and only breeder of the variety Proto IV and base novelty on the following.

Proto IV plant characters are unique from any commercial variety presently being used. The plant has a normal size stipule but leaflets are totally absent. The tendril structures are more numerous than the standard pea plants. See illustrations below—

Normal



Proto IV





Prot IV 13 B Exhibit B continued

Proto IV pods are borne 2, 3 & 4 per peduncle whereas Dark Skin Perfections are only 1 and 2 per peduncle.

Proto IV average sieve size is 4.21 whereas Dark Skin Perfections average sieve size is 4.47

Proto IV bears its pods in a more concentrated set toward the top of the plant than does Dark Skin Perfection making Proto IV more uniform in maturity.

Proto IV average plant height is 90cm whereas Dark Skin Perfection plant height averages only 70cm tall.

Proto IV because of its increased numbers of tendrils stands very erect, even when pods are full. Dark Skin Perfection is very susceptible to lodging.

markings enhanced JEF 791129
PROTOIV VARIETY NAME DESIGNATION OUE 22979 VARIETY NUMBER
3 TYPE OF SAMPLE 0 = na (no answer); 1 = cross; 2 = single plant selection; 3 = bulk selection
ORIGIN [(Dark Skin Perfection x B77-161-) x B-77-161] x4 B572-543
13 GENERATION
HISTORY (FOR PREVIOUS YEAR) VARIETY NAME DESIGNATION
DISPOSITION 0 = na; 1 = discard; 2 = hold; 3 = increase; 4 = increase and reselect; 5 = increase and retest; 6 = test for disease reaction; 7 = sample to research station; 8 = sample to customer
USE 0 = na; 1 = canner; 2 = canner-freezer; 3 = dry edible; 4 = edible pod; 5 = feed grain
GENERAL TYPE 0 = na; 1 = garden; 2 = field; 3 = edible pod
INTERNODE TYPE 0 = na; 1 = internodes straight; 2 = internodes zigzag
SEASON; NODE NUMBER OF FIRST BLOOM 0 = na; 1 = early (8th-12th node); 2 = midseason (13th-15th node); 3 = late (16th-24th node)
MATURITY 2 number of days earlier than 5 15 number of days later than 1 = Alaska WR; 2 = Thomas Laxton WR; 3 = Little Marvel; 4 = Wando; 5 = Alderman WR
COMPARATIVE PLANT HEIGHT 07 cm. shorter than 2 29 cm. taller than 7 ABSOLUTE PLANT HEIGHT 1 = Alaska WR; 2 = Thomas Laxton WR; 3 = Little Marvel; 4 = Wando; 5 = Alderman WR
VINE
Habit 0 = na; 1 * determinate; 2 = undecided; 3 = indeterminate.
Branching 0 = na; 1 = none; 2 = one to two branches (Little Marvel); 3 = more than two branches (Dwarf Grey Sugar)
15-16 Number of Nodes to First Bloom OS cm. Internode Length (just below first flowering node)
Color (Royal Society Color Chart)
LEAFLETS Color C Wax 0 = na; 1 = none; 2 = light; 3 = medium; 4 = heavy Marbling 0 = na; 1 = none; 2 = marble
Number of Pairs 0 = na; 1 = one; 2 = two; 3 = three or more; 4 = not paired; 5 = none
STIPULES
Presence 0 = na; 1 = lacking; 2 = present Marbling 0 = na; 1 = not marbled; 2 = marbled
Color Compared with Leaflets 0 = na; 1 = lighter; 2 = same; 3 = darker Clasping 0 = na; 1 = not cls. 2 = cls.
Size Compared with Leaflets 0 = na; 1 = smaller; 2 = same; 3 = larger
FLOWER COLOR 2 Venation Standard Wing Keel 0 = na; 1 = white; 2 = greenish; 3 = lavender; 4 = purple; 5 = red
Monocolor or Bicolor 0 = na; 1 = monocolor; 2 = bicolor
PODS
Shape 0 = na. 1 = straight; 2 = slightly curved; 3 = curved 2 End 0 = na; 1 = pointed; 2 = blunt (Alaska)
Color 2 Surface 0 = na; 1 = smooth; 2 = rough 0 7 cm. Length mm. Width (between sutures)
Number of Pods/Peduncle
YIELD AND EFFICIENCY 497 Eco. Yield sms. 9 O Harvest index (7) 7 7 7 9 1 Biological Violation 9
NODULATION Eco. Yield gms. 2 O Harvest index (%) 2 3 2 2 Biological Yiels is grams
Presence 0 = na; 1 = not present; 2 = present 4/1 mm. Size if Present Color
Insect Damage 0 = na; 1 = nemotode; 2 = citona larva; 3 = nemotode and citona larva 8000001
Lateral Roots: 44 of nodules at a depth less than 15 cm. 2/ # of nodules at a depth greater than 15 cm.

3-100 TENDEROMETER SEEDS	
Shape 0 = na; 1 = flattened; 2 = angular; 3 = oval; 4 = rounded Surface Color Coty Color	
2 Surface 0 = na; 1 = shiny; 2 = dull. English-Sieve Seed Distribution (%): O 2 weare-mathem sieve #1;	
III useable larger than sieve #2; /5 direction sieve #3; 2 4 than #4; 3 5 than #5 /6 then #6;	former.
OO #7; OO than #8; O O than #9. Metric-Sieve Seed Distrib.(%): waste smaller than 7.10 mm;	[
useable larger than 7.90; ditto than 8.71; than 9.51; than 10.30; than 11.10	
ATURE, DRY SEEDS	
Mono or Bicolor 0 = na; 1 = monocolor; 2 = bicolor. Primary Color Secondary Color	
Color Pattern 0 = na; 1 = splashed; 2 = mottled; 3 = striped; 4 = flecked; 5 = dotted; 6 = uniform color	
Hilum Floor Color 0 = na; 1 = white; 2 = tan; 3 = black Coty col. / 8 gm/100 seeds size in	
Shape 0 = na; 1 = flattened; 2 = angular; 3 = oval; 4 = rounded Surface 1 = wrinkled; 10 = smooth	
LANT REACTION TO ELEMENTS	
O C Drought O O Cold O C heat 0 = not tested; 1 = most susceptible; 10 = most resistant	
Quantity of Seeds Planted 250,0 Weight of Seeds Plantedin grams	
8 7 Range # (1-50) 0 0 4 Row # (1-200) 0 0 Wire # (1-500) 0 (Field # (1-50)	
Range # (1-50) O U Row # (1-200) O Q Wire # (1-500) O / Field # (1-50) Range Axis Wire Axis 0 = na; 1 = E to W; 2 = W to E; 3 = N to S; 4 = S to N	
DATES	
052979 Planting Date (month, day, year) 063 Up (month, day) 0676 Bloom	•
Canning Cut OORY harvest	
STAND STAND	
Plants per square yard (up to 500)	
WEIGHT	· · · · · · · · · · · · · · · · · · ·
Field Run (up to 40,000 lb) (up to 1,000,000 gm)	-
Mill Run (ditto) (ditto)	
OOI2.1 Hand Picked (ditto) (ditto)	
INVENTORY	
/ 6 5 5 up to 40,000 lb up to 1,000,000 gm	
DISEASE: 0 = not tested; 1 = most susceptible; 10 = most resistant Root Rot Complex: O O ascochyta O O aphanomyces O O rhizotonia O O pythium O O fusarium solani	
ald allowed by the Color of the	
0 0 0 0 0 P.S.B.M. virus	
DISEASE: 0 = not tested; 1 = absolutely susceptible; 2 = segregating for resistance; 3 = absolutely resistant. Pea enation mosaic	
citons or leaf weevil Common pea weevil nemotods wire worms	
MILDEW: 0 = not tested; 1 = susceptible; 2 = segregating for resistance; ROOT STRUCTURE TYPE	
powdery mildew odowny mildew 3 = absolutely resistant	
QUALITY OF PEAS	
OO % of defective peas OO % color of processed peas	7 mg
Bitterness: 0 = no test; 1 = most bitter; 10 = least bitter 09 Unprocessed 09 Processed	
Starchiness: 0 = no test; 1 = most starchy; 10 = most sweet O 7 Unprocessed O 7 Processed 800001	Same and the second
ADDITIONAL NOTES	

FORM GR-470-14 (3-78)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, POULTRY, GRAIN & SEED DIVISION NATIONAL AGRICULTURAL LIBRARY BELTSVILLE, MARYLAND 20705 OBJECTIVE DESCRIPTION OF VARIETY

EXHIBIT C (Pea)

PEA (PISUM SATIVUM)						
NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION					
Wilbur-Ellis Co. Seed Division ADDRESS (Street and No. or R. F. D. No., City, State, and ZIP Code)	The first of the first of the second of the					
	Proto IV					
E. 12001 Empire Way	PVPO NUMBER COOCOOM					
Spokane, Washington 99206	800001					
Place the appropriate number that describes the varietal character in the boxes below	·					
Place a zero in first box (e-8. 0 8 9 or 0 9) when number is either 99 or less	or 9 or less.					
1. TYPE:						
1 1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED						
2. MATURITY:	· · · · · · · · · · · · · · · · · · ·					
15 -16 Node number of first bloom: 0 7 0 No. of days to processing	1 6 5 0 Heat Units					
	S LAXTON WR 3 = LITTLE MARVEL					
1 5 No. of days Later than	VR 6 = AUSTRIAN WINTER					
3. PLANT HEIGHT:						
0 9 0 CM. HIGH						
0 7 Cm. Shorter than 2 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL						
2 9 Cm. Taller than	/R 6 = AUSTRIAN WINTER					
4. VINE:						
	= SLIM (Alaska) 3 = HEAVY (Alderman) = MEDIUM (Thomas Laxton WR)					
Branching: 1 = NONE (Alaska) 2 - 1-2 BRANCHES (L'ittle Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar)						
1 Internodes: 1 = STRAIGHT 2 = ZIG ZAG 1 9 NUMBER O	F NODES					
5. LEAFLETS: None N/A	v-\$					
1 = LIGHT GREEN (Alaska WR) 2 = MED, GREEN (Thomas Laxton WR Color: 4 = OTHER (Specify)	3 = DARK GREEN (Alderman)					
	region to the					
Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 1 = NOT MARE 4 = HEAVY	BLED 2 = MARBLED (Alaska)					
Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = T	HREE OR MORE					
6. STIPULES:						
2 1 = LACKING 2 = PRESENT 1 = NOT CLASE	PING 2 = CLASPING 2 AND					
1 = NOT MARBLED 2 = MARBLED N/A Size (Compared	None 1 = SMALLER 2 = SAME with leaflets): 3 = LARGER					
None None Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER						
7. FLOWER COLOR:						
2 VENATION 1 STANDARD 1 WING 1 KEEL 4=PL	HITE 2 = GREENISH 3 = LAVENDEF JRPLE 5 = RED THER (Specify)					

-								
8. PODS:								
1 = STR/ 1 Shape: 3 = CUR	AIGHT 2 = SLIGHTLY CURVED VED	2 End: 1 = POINTED (Alderm	an) 2 = BLUNT (Alaska)					
	IT GREEN (Alaska WR) 2 = MEDIUM ER (Specify)	// GREEN 3 = DARK GREEN (Alder	man) got a service state of					
2 Surface: 1 = SM	MOOTH 2 = ROUGH	2 Surface: 1 = SHINY	2 = DULL					
i = 1	NGLE 2 = DOUBLE 3 = SING OUBLE & TRIPLE 6 = TRIPLE	LE AND DOUBLE 4 = SINGLE, DO 7 = OTHER (Specify)	OUBLE, & TRIPEE					
0 7 CM. LENGTH		MM. WIDTH (Between sutures)	0 7 NO. SEEDS PER POD					
9. SEEDS (95100 Tenderon	neter):							
3 Color: 1 =	LIGHT GREEN 2 = GREEN 3	DARK GREEN 4 = OTHER (Specification)	y)					
Seive: % 0 2 1	1 1 5 2 4 3	5 6 7 2 1 6 0 0 0	8 AVERAGE 0 4.2 1					
SEEDS (Dry, Mature):								
4 Shape: 1 = FLA	ATTENED 2 = ANGULAR 3 =	OVAL 4 = ROUNDED						
19 (OOTH 2 = DIMPLED	2 Surface: 1 = SHINY	2 = DULL					
2 Color Pattern:	1 = MONOCOLOR 2 = MOTTLED	3 = STRIPED 4 = DOTTED						
4 Primary Color: 1 = CREAMY-WHITE 2 = CREAM & GREEN 3 = LIGHT GREEN 4 = MEDIUM GREEN								
2 Secondary Color:		EEN 7 = YELLOW 8 = BROWN	9 = RED					
2 Hitum Floor Color:	1 = WHITE 2 = TAN 3 = BLACK	1 Cotyledon Color: 1 = GREE	N 2 = YELLOW 3 = ORANG					
1 8 GRAMS PER 100	SEEDS							
10. DISEASE: (0 = Not Tested	d; 1 = Susceptible; 2 = Resistant)							
2 FUSARIUM WILT		0 NEAR-WILT	O DOWNY MILDEW					
0 ASCOCHYTA BLIGH	IT	1 POWDERY MILDEW	0 BACTERIAL BLIGHT					
0 MOSAIC		O PEA ENATION MOSAIC	O YELLOW BEAN MOSAIC					
O OTHER (Specify)								
11. INSECT: (O= Not Tested;	1 = Susceptible; 2 = Resistant)							
0 APHIDS		OTHER (Specify)	en la superiori de la compania de l Al superiori de la compania de la c					
	TY MOST CLOSELY RESEMBLES TH	AT SUBMITTED						
CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY					
<u>Leafiness</u>	None None	Fresh Seed Color	Dark Skin Perf.					
Leaf Color Pod Color	Dark Skin Perfection	Mature Seed Color	Dark Skin Perf. Dark Skin Perf.					
Pod Color Pod Shape	Ddrk Skin Perfection	Seed Shape	Dark Skin Perf.					
Pod Shape Dark Skin Periection Plant Habit Dark Skin Peri. COMMENTS:								

8000001 JC 7



WILBUR-ELLIS COMPANY

SEED DIVISION

13 D EXHIBIT D
Additional Description of the Variety Proto IV
-See attached data sheets -

1000008